

## Syngp120mn

1 CTCGAGATCC ATTGTGCTCT AAAGGAGATA CCCGGCCAGA CACCCTCACC  
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 101 CCATGGGGTC TCTGCAACCG CTGGCCACCT TGTACCTGCT GGGGATGCTG  
 151 GTCGCTTCCG TGCTAGCCAC CGAGAAGCTG TGGGTGACCG TGTACTACGG  
 201 CGTGCCCCTG TGGAAGGAGG CCACCACAC CCTGTTCTGC GCCAGCGACG  
 251 CCAAGGCGTA CGACACCGAG GTGCACAACG TGTGGGCCAC CCAGGCGTGC  
 301 GTGCCCAACCG ACCCCAACCC CCAGGAGGTG GAGCTCGTGA ACGTGACCGA  
 351 GAACTTCAAC ATGTGGAAGA ACAACATGGT GGAGCAGATG CATGAGGACA  
 401 TCATCAGCCT GTGGGACCAAG AGCCTGAAGC CCTGCGTGAA GCTGACCCCC  
 451 CTGTGCGTGA CCCTGAACCTG CACCGACCTG AGGAACACCA CAAACACCAA  
 501 CAACAGCACC GCCAACAAACA ACAGCAACAG CGAGGGCACC ATCAAGGGCG  
 551 GCGAGATGAA GAACTGCAGC TTCAACATCA CCACCAGCAT CCGCGACAAG  
 601 ATGCAGAAGG AGTACGCCCT GCTGTACAAG CTGGATATCG TGAGCATCGA  
 651 CAACGACAGC ACCAGCTACC GCCTGATCTC CTGCAACACCC AGCGTGATCA  
 701 CCCAGGCCTG CCCCAAGATC AGCTTCGAGC CCATCCCCAT CCACTACTGC  
 751 GCCCCCGCCG GCTTCGCCAT CCTGAAGTGC AACGACAAGA AGTCAGCGG  
 801 CAAGGGCAGC TGCAAGAACG TGAGCACCGT GCAGTGCACC CACGGCATCC  
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 901 GAGGTGGTGA TCCGCAGCGA GAACTTCACC GACAACGCCA AGACCATCAT  
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 1251 CAGCCCCCTG TTCAACAGCA CCTGGAACGG CAACAAACACC TGGAAACAACA  
 1301 CCACCGGCAG CAACAAACAAT ATTACCCCTCC AGTGCAAGAT CAAGCAGATC  
 1351 ATCAACATGT GGCAGGAGGT GGGCAAGGCC ATGTACGCC CCCCCATCGA  
 1401 GGGCCAGATC CGGTGCAGCA GCAACATCAC CGGTCTGCTG CTGACCCGCG  
 1451 ACGGCGGCAA GGACACCGAC ACCAACGACA CCGAAATCTT CCGCCCCGGC

1501 GGC GGCGACA TGC GCGACAA CTGGAGATCT GAGCTGTACA AGTACAAGGT  
1551 GGTGACGATC GAGCCCCTGG GCGTGGCCCC CACCAAGGCC AAGCGCCGCG  
1601 TGGTGCAGCG CGAGAAGCGC TAAAGCGGCC GC (SEQ ID NO: 34)

Fig. 1B

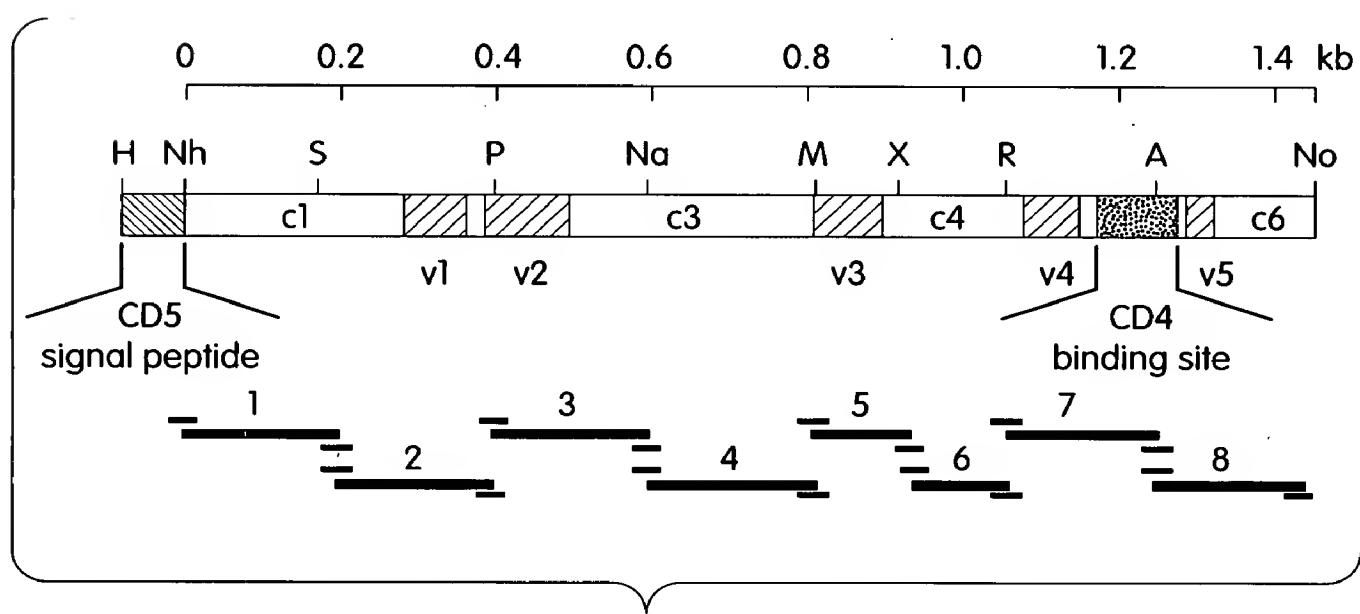
## Syngp160mn

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 101 AGGTGCACAA CGTGTGGGCC ACCCAGGCGT GCGTGCCCAC CGACCCCAAC  
 151 CCCCAGGAGG TGGAGCTCGT GAACGTGACC GAGAACTTCA ACATGTGGAA  
 201 GAACAACATG GTGGAGCAGA TGCATGAGGA CATCATCAGC CTGTGGGACC  
 251 AGAGCCTGAA GCCCTGCGTG AAGCTGACCC CCCTGTGCGT GACCCCTGAAC  
 301 TGCACCGACC TGAGGAACAC CACCAACACC AACAAACAGCA CCGCCAACAA  
 351 CAACAGCAAC AGCGAGGGCA CCATCAAGGG CGGCGAGATG AAGAACTGCA  
 401 GCTTCAACAT CACCACCAAGC ATCCGCGACA AGATGCAGAA GGAGTACGCC  
 451 CTGCTGTACA AGCTGGATAT CGTGAGCATC GACAACGACA GCACCAGCTA  
 501 CCGCCTGATC TCCTGCAACA CCAGCGTGAT CACCCAGGCC TGCCCCAAGA  
 551 TCAGCTTCGA GCCCATCCCC ATCCACTACT GCGCCCCCGC CGGCTTCGCC  
 601 ATCCTGAAGT GCAACGACAA GAAGTTCAAGC GGCAAGGGCA GCTGCAAGAA  
 651 CGTGAGCACC GTGCAGTGCA CCCACGGCAT CGGGCCGGTG GTGAGCACCC  
 701 AGCTCCTGCT GAACGGCAGC CTGGCCGAGG AGGAGGTGGT GATCCGCAGC  
 751 GAGAACTTCA CCGACAACGC CAAGACCATC ATCGTGCACC TGAATGAGAG  
 801 CGTGCAGATC AACTGCACGC GTCCCAACTA CAACAAGCGC AAGCGCATCC  
 851 ACATCGGCCCG CGGGCGCGCC TTCTACACCA CCAAGAACAT CATCGGCACC  
 901 ATCCGCCAGG CCCACTGCAA CATCTCTAGA GCCAAGTGGA ACGACACCCCT  
 951 GCGCCAGATC GTGAGCAAGC TGAAGGAGCA GTTCAAGAAC AAGACCATCG  
 1001 TGTTCAACCA GAGCAGCGGC GGCGACCCCG AGATCGTGAT GCACAGCTTC  
 1051 AACTGCGGCG GCGAATTCTT CTACTGCAAC ACCAGCCCC TGTTCAACAG  
 1101 CACCTGGAAC GGCAACAAACA CCTGGAACAA CACCACCGC AGCAACAACA  
 1151 ATATTACCCCT CCAGTGCAAG ATCAAGCAGA TCATCAACAT GTGGCAGGAG  
 1201 GTGGGCAAGG CCATGTACGC CCCCCCCATC GAGGGCCAGA TCCGGTGCAG  
 1251 CAGCAACATC ACCGGTCTGC TGCTGACCCG CGACGGCGGC AAGGACACCG  
 1301 ACACCAACGA CACCGAAATC TTCCGCCCG GCGGCGGCGA CATGCGCGAC  
 1351 AACTGGAGAT CTGAGCTGTA CAAGTACAAG GTGGTGACGA TCGAGCCCT  
 1401 GGGCGTGGCC CCCACCAAGG CCAAGCGCCG CGTGGTGCAG CGCGAGAAC  
 1451 GGGCCGCCAT CGGCGCCCTG TTCTGGGCT TCCTGGGGC GGCGGGCAGC

Fig. 1C

1501 ACCATGGGGG CCGCCAGCGT GACCCTGACC GTGCAGGCC GCCTGCTCCT  
1551 GAGCGGCATC GTGCAGCAGC AGAACAAACCT CCTCCGCGCC ATCGAGGCC  
1601 AGCAGCATAT GCTCCAGCTC ACCGTGTGGG GCATCAAGCA GCTCCAGGCC  
1651 CGCGTGCTGG CCGTGGAGCG CTACCTGAAG GACCAGCAGC TCCTGGGCTT  
1701 CTGGGGCTGC TCCGGCAAGC TGATCTGCAC CACCACGGTA CCCTGGAACG  
1751 CCTCCTGGAG CAACAAGAGC CTGGACGACA TCTGGAACAA CATGACCTGG  
1801 ATGCAGTGGG AGCGCGAGAT CGATAACTAC ACCAGCCTGA TCTACAGCCT  
1851 GCTGGAGAAG AGCCAGACCC AGCAGGAGAA GAACGAGCAG GAGCTGCTGG  
1901 AGCTGGACAA GTGGGCGAGC CTGTGGAACT GGTCGACAT CACCAACTGG  
1951 CTGTGGTACA TCAAAATCTT CATCATGATT GTGGCGGCC TGGTGGCCT  
2001 CCGCATCGTG TTCGCCGTGC TGAGCATCGT GAACCGCGTG CGCCAGGGCT  
2051 ACAGCCCCCT GAGCCTCCAG ACCCGGCCCG CCGTGCCGCG CGGGCCCGAC  
2101 CGCCCCGAGG GCATCGAGGA GGAGGGCGGC GAGCGCGACC GCGACACCAG  
2151 CGGCAGGCTC GTGCACGGCT TCCTGGCGAT CATCTGGTC GACCTCCGCA  
2201 GCCTGTTCCCT GTTCAGCTAC CACCACCGCG ACCTGCTGCT GATGCCCGCC  
2251 CGCATCGTGG AACTCCTAGG CCGCCGCGGC TGGGAGGTGC TGAAGTACTG  
2301 GTGGAACCTC CTCCAGTATT GGAGCCAGGA GCTGAAGTCC AGCGCCGTGA  
2351 GCCTGCTGAA CGCCACCGCC ATCGCCGTGG CCGAGGGCAC CGACCGCGTG  
2401 ATCGAGGTGC TCCAGAGGGC CGGGAGGGCG ATCCTGCACA TCCCCACCCG  
2451 CATCCGCCAG GGGCTCGAGA GGGCGCTGCT G (SEQ ID NO: 35)

Fig. 1D



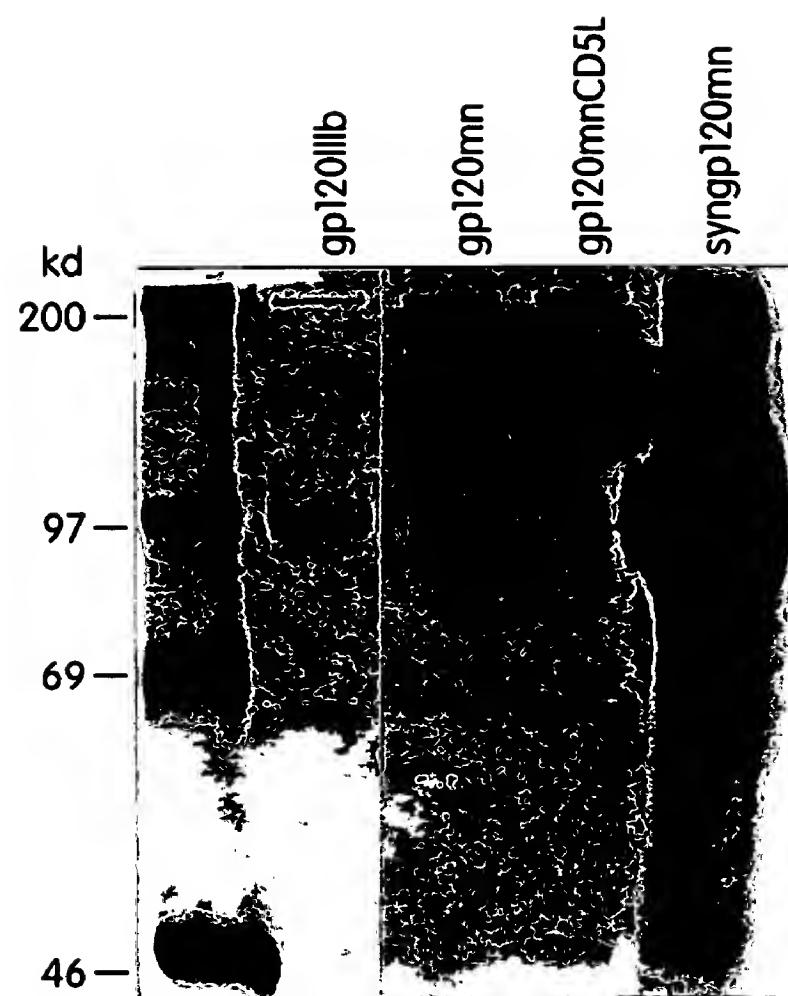


Fig. 3

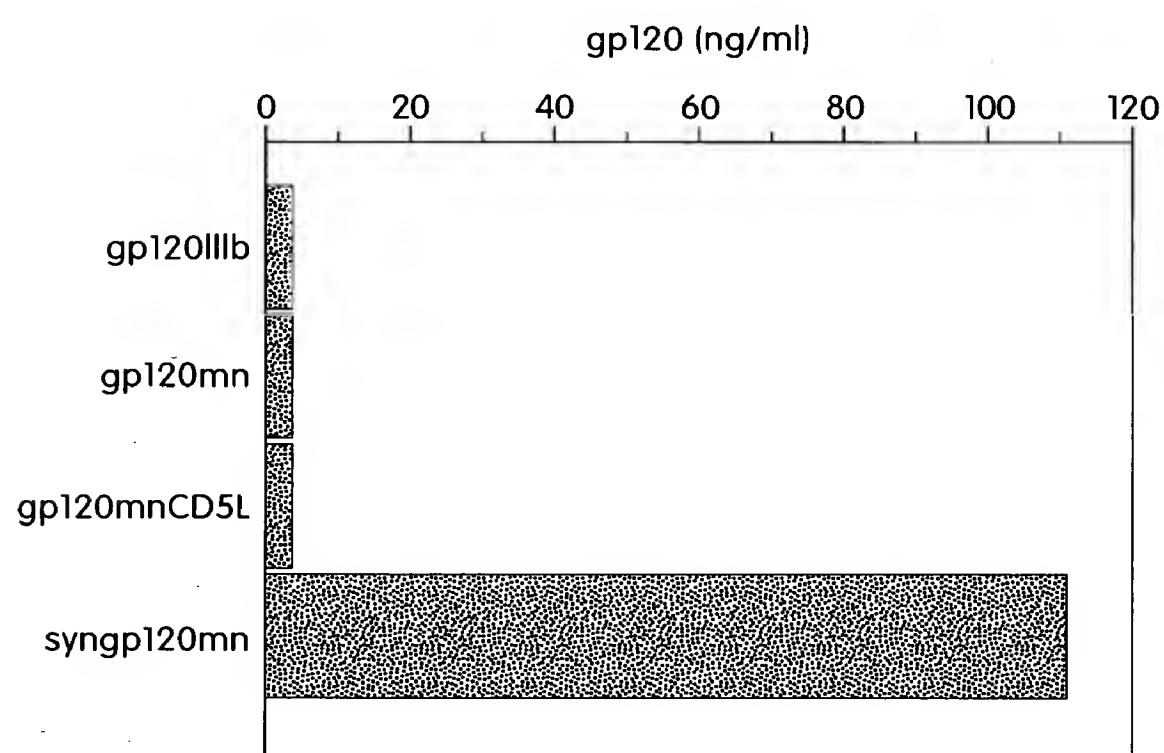


Fig. 4

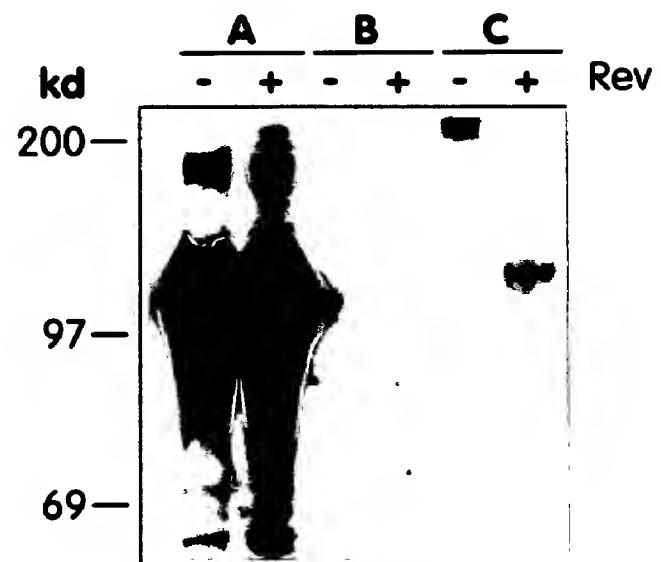


Fig. 5A

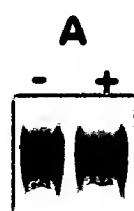


Fig. 5B

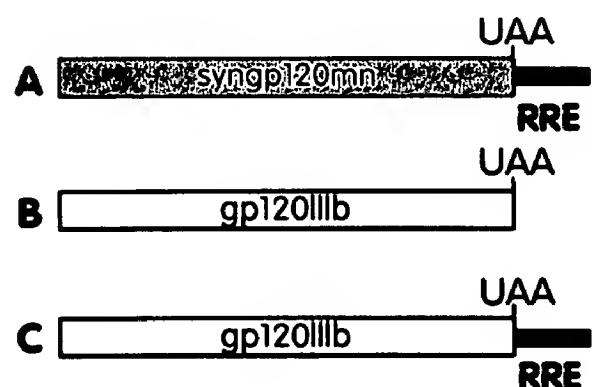


Fig. 5C

env	atg	aat	cca	gtt	ata	agt	ata	aca	tta	tta	agt	gtt	caa	tta	atg	agt	aga	ggg	caa	60
wt	M	N	P	V	I	S	I	T	L	L	ctg	ctc	ctg	ctt	cgt	atg	tcc	cga	ggg	cag
env	aga	gtt	ata	agt	tta	aca	gca	tgt	tta	gtt	aat	caa	tta	tgt	aga	tta	gat	tgc	cgt	Q
wt	R	V	I	S	L	T	A	C	L	V	N	Q	N	L	R	D	C	R	H	
env	gaa	aat	aca	aat	ttg	cca	ata	caa	cat	gaa	ttt	tca	tta	acg	cgt	gaa	aaa	aaa	aaa	180
wt	E	N	N	T	N	L	P	I	Q	H	E	F	S	L	T	R	E	K	K	
env	cat	gtt	tta	agt	ggg	aca	tta	ggg	gtt	ccc	gaa	cat	aca	tat	aga	gtt	aaa	aag	aag	240
wt	H	V	L	S	G	T	L	G	V	P	E	H	T	Y	R	S	R	V	N	
env	ttt	agt	gat	aga	tcc	ata	aaa	gtt	tta	aca	ttt	gca	aat	ttt	aca	aca	aaa	gat	gag	300
wt	F	S	D	R	F	I	K	V	L	T	A	N	F	T	T	K	D	E	G	
env	gat	tat	atg	tgt	gag	ctc	aga	gtt	ggg	cag	ttc	acc	acc	acc	acc	acc	aag	gat	gag	360
wt	D	Y	M	C	E	L	R	V	S	G	Q	N	P	T	S	N	K	T	I	
env	aat	gtt	ata	aga	gat	aaa	tta	gtt	aaa	tgt	ggg	ata	agt	aat	aaa	aca	ata	ata	ata	420
wt	N	V	I	R	D	K	L	V	K	C	G	I	S	L	V	Q	N	T	T	
env	agt	tgg	tta	agt	ttt	tta	caa	gca	aca	gat	ttt	ata	agt	480						
wt	S	W	L	L	L	L	L	S	L	S	F	L	Q	A	T	D	F	I	S	
env	tta	tga	486																	(SEQ ID NO: 36)
wt	ctg	tga	*																	(SEQ ID NO: 37)

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Fig. 6

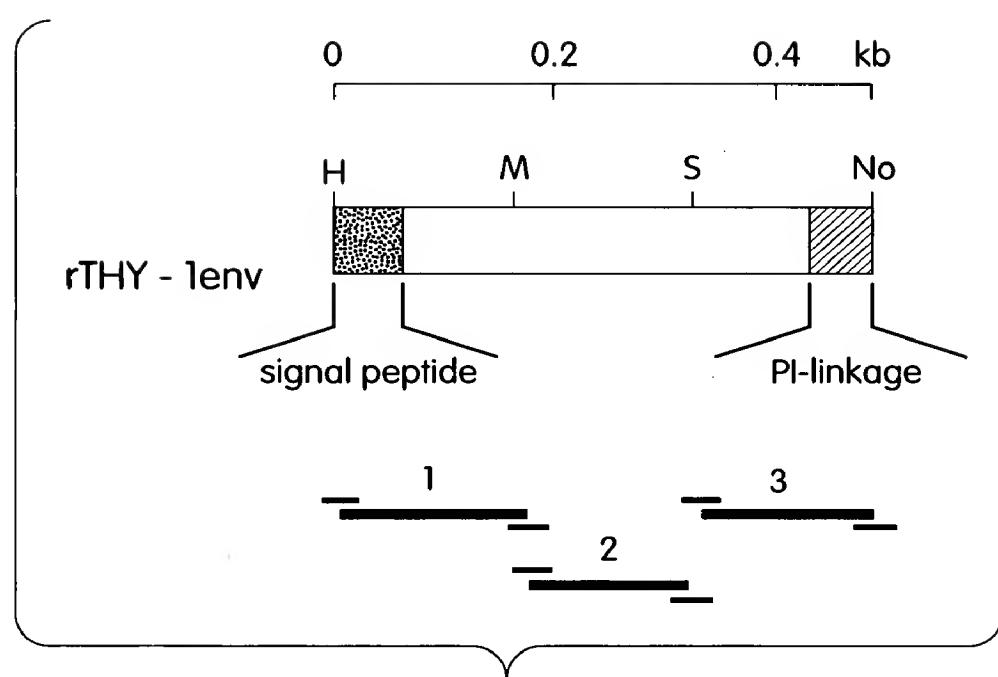


Fig. 7

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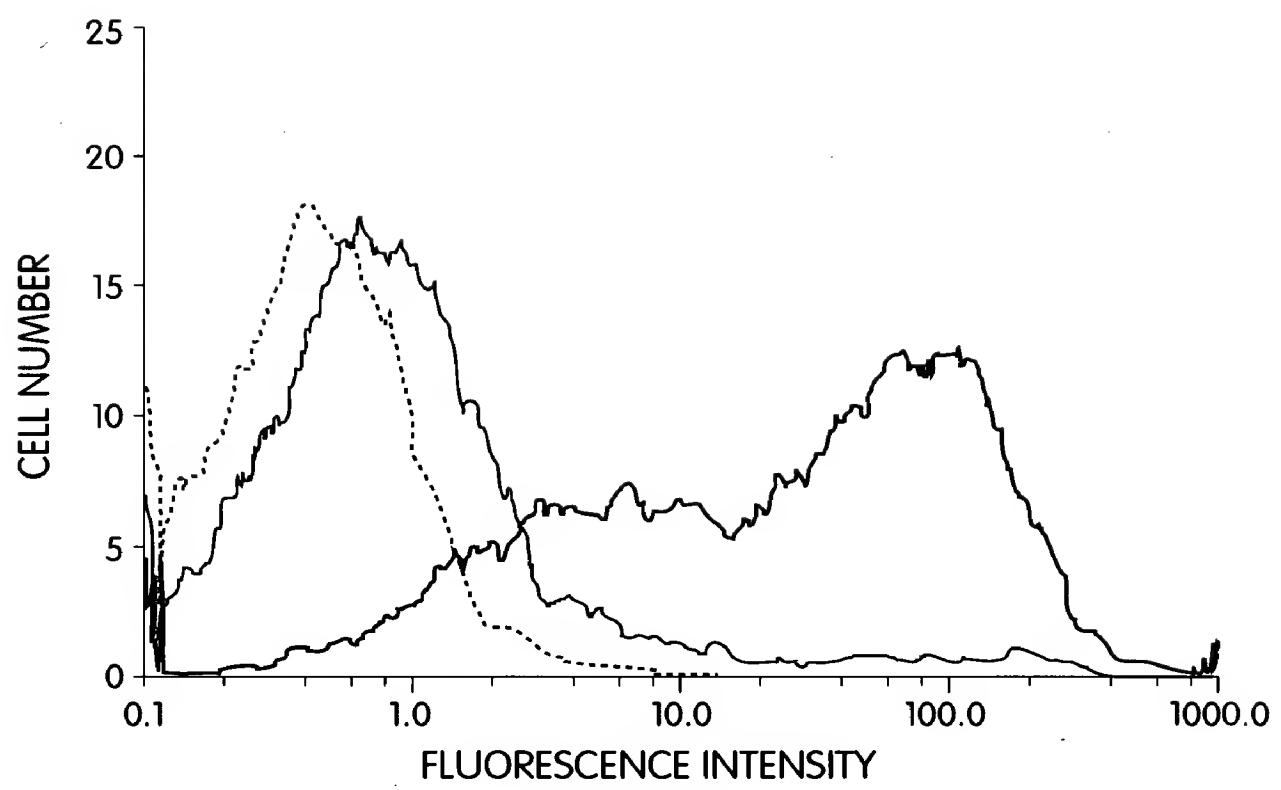


Fig. 8

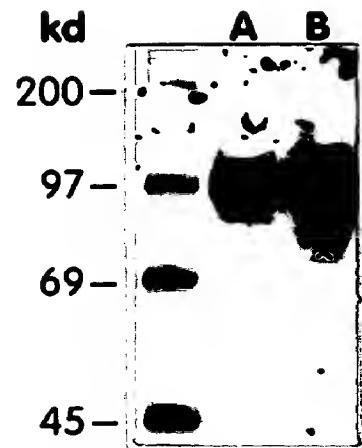


Fig. 9A

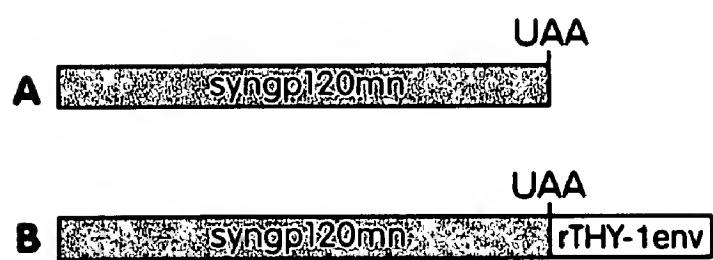
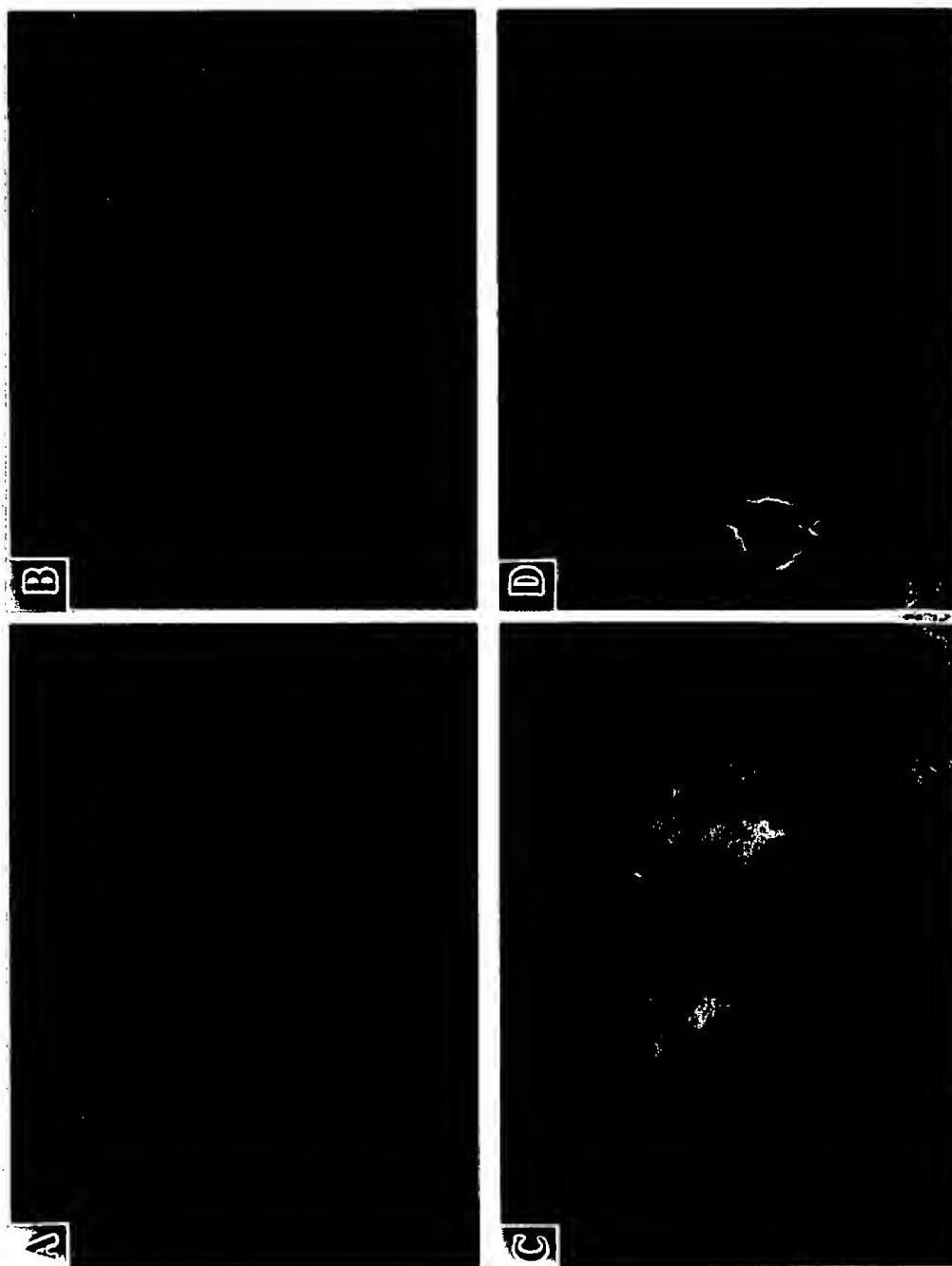


Fig. 9B

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10  
Fig

1 GAATTCACGC GTAAGCTTGC CGCCACCATG GTGAGCAAGG GCGAGGAGCT  
51 GTTCACCGGG GTGGTGCCA TCCTGGTCGA GCTGGACGGC GACGTGAACG  
101 GCCACAAGTT CAGCGTGTCC GGCGAGGGCG AGGGCGATGC CACCTACGGC  
151 AAGCTGACCC TGAAGTTCAT CTGCACCACC GGCAAGCTGC CGTGCCCTG  
201 GCCCACCCCTC GTGACCACCT TCAGCTACGG CGTGCAGTGC TTCAGCCGCT  
251 ACCCCGACCA CATGAAGCAG CACGACTTCT TCAAGTCCGC CATGCCGAA  
301 GGCTACGTCC AGGAGCGCAC CATCTCTTC AAGGACGACG GCAACTACAA  
351 GACCCGCGCC GAGGTGAAGT TCGAGGGCGA CACCTGGTG AACCGCATCG  
401 AGCTGAAGGG CATCGACTTC AAGGAGGACG GCAACATCCT GGGGCACAAG  
451 CTGGAGTACA ACTACAACAG CCACAACGTC TATATCATGG CCGACAAGCA  
501 GAAGAACGGC ATCAAGGTGA ACTTCAAGAT CCGCCACAAC ATCGAGGACG  
551 GCAGCGTGCA GCTCGCCGAC CACTACCAGC AGAACACCCC CATCGCGAC  
601 GGCCCCGTGC TGCTGCCGA CAACCACTAC CTGAGCACCC AGTCCGCCCT  
651 GAGCAAAGAC CCCAACGAGA AGCGCGATCA CATGGTCCTG CTGGAGTTCG  
701 TGACCGCCGC CGGGATCACT CACGGCATGG ACGAGCTGTA CAAGTAAAGC  
751 GGCGCGGGAT CC

Fig. 11

1	AAGCTTAAAC	CATGCCCATG	GGGTCTCTGC	AACCGCTGGC	CACCTTGTAC
51	CTGCTGGGGA	TGCTGGTCGC	TTCCGTGCTA	GCCGCCACCA	GAAGATACTA
101	CCTGGGTGCA	GTGGAACGTG	CATGGGACTA	TATGCAAAGT	GATCTCGGTG
151	AGCTGCCTGT	GGACGCAAGA	TTTCCTCCTA	GAGTGCCAAA	ATCTTTCCA
201	TTCAACACCT	CAGTCGTGTA	CAAAAAGACT	CTGTTGTAG	AATTACCGGA
251	TCACCTTTTC	AACATCGCTA	AGCCAAGGCC	ACCCCTGGATG	GGTCTGCTAG
301	GTCCTACCAT	CCAGGCTGAG	GTTTATGATA	CAGTGGTCAT	TACACTTAAG
351	AACATGGCTT	CCCATCCTGT	CAGTCTTCAT	GCTGTTGGTG	TATCCTACTG
401	GAAAGCTTCT	GAGGGAGCTG	AATATGATGA	TCAGACCACT	CAAAGGGAGA
451	AAGAAGATGA	TAAAGTCTTC	CCTGGTGGAA	GCCATACATA	TGTCTGGCAG
501	GTCCTGAAAG	AGAATGGTCC	AATGGCCTCT	GACCCACTGT	GCCTTACCTA
551	CTCATATCTT	TCTCATGTGG	ACCTGGTAAA	AGACTTGAAT	TCAGGCCTCA
601	TTGGAGCCCT	ACTAGTATGT	AGAGAAGGGA	GTCTGGCCAA	GGAAAAGACA
651	CAGACCTTGC	ACAAATTAT	ACTACTTTT	GCTGTATTTG	ATGAAGGGAA
701	AAGTTGGCAC	TCAGAAACAA	AGAACTCCTT	GATGCAGGAT	AGGGATGCTG
751	CATCTGCTCG	GGCCTGGCCT	AAAATGCACA	CAGTCAATGG	TTATGTAAAC
801	AGGTCTCTGC	CAGGTCTGAT	TGGATGCCAC	AGGAAATCAG	TCTATTGGCA
851	TGTGATTGGA	ATGGGCACCA	CTCCTGAAGT	GCACCTCAATA	TTCCTCGAAG
901	GTCACACATT	TCTTGTGAGG	AACCATCGCC	AGGCGTCCTT	GGAAATCTCG
951	CCAATAACTT	TCCTTACTGC	TCAAACACTC	TTGATGGACC	TTGGACAGTT
1001	TCTACTGTTT	TGTCAATATCT	CTTCCCACCA	ACATGATGGC	ATGGAAGCTT
1051	ATGTCAAAGT	AGACAGCTGT	CCAGAGGAAC	CCCAACTACG	AATGAAAAAT
1101	AATGAAGAAG	CGGAAGACTA	TGATGATGAT	CTTACTGATT	CTGAAATGGA
1151	TGTGGTCAGG	TTTGATGATG	ACAACTCTCC	TTCCCTTATC	CAAATTGCT
1201	CAGTTGCCAA	GAAGCATTCT	AAAACCTGGG	TACATTACAT	TGCTGCTGAA
1251	GAGGAGGACT	GGGACTATGC	TCCCTTAGTC	CTCGCCCCCG	ATGACAGAAG
1301	TTATAAAAGT	CAATATTGAT	ACAATGGCCC	TCAGCGGATT	GGTAGGAAGT
1351	ACAAAAAAAGT	CCGATTATG	GCATACACAG	ATGAAACCTT	TAAGACTCGT
1401	GAAGCTATTTC	AGCATGAATC	AGGAATCTTG	GGACCTTTAC	TTTATGGGGA
1451	AGTTGGAGAC	ACACTGTTGA	TTATATTAA	GAATCAAGCA	AGCAGACCAT
1501	ATAACATCTA	CCCTCACCGA	ATCACTGATG	TCCGTCCTTT	GTATTCAAGG
1551	AGATTACCAA	AAAGGTGTAAA	ACATTGAAAG	GATTTCCAA	TTCTGCCAGG
1601	AGAAAATATTC	AAATATAAAT	GGACAGTGAC	TGTAGAAGAT	GGGCCAACTA
1651	AATCAGATCC	TCGGTGCCCTG	ACCCGCTATT	ACTCTAGTTT	CGTTAATATG
1701	GAGAGAGATC	TAGCTTCAGG	ACTCATTGGC	CCTCTCCTCA	TCTGCTACAA
1751	AGAATCTGTA	GATCAAAGAG	GAAACCAAGAT	AATGTCAGAC	AAGAGGAATG
1801	TCATCCTGTT	TTCTGTATTT	GATGAGAAC	GAAGCTGGTA	CCTCACAGAG
1851	AATATACAAC	GCTTTCTCCC	CAATCCAGCT	GGAGTGCAGC	TTGAGGATCC
1901	AGAGTTCCAA	GCCTCCAACA	TCATGCACAG	CATCAATGGC	TATGTTTTG
1951	ATAGTTGCA	GTTGTCAGTT	TGTTTGCATG	AGGTGGCATA	CTGGTACATT
2001	CTAACGATTG	GAGCACAGAC	TGACTTCCTT	TCTGTCTTCT	TCTCTGGATA
2051	TACCTTCAAA	CACAAAATGG	TCTATGAAGA	CACACTCACC	CTATTCCCAT
2101	TCTCAGGAGA	AACTGTCTTC	ATGTCGATGG	AAAACCCAGG	TCTATGGATT
2151	CTGGGGTGCC	ACAACTCAGA	CTTTCGGAAC	AGAGGCATGA	CCGCCTTACT
2201	GAAGGTTTCT	AGTTGTGACA	AGAACACTGG	TGATTATTAC	GAGGACAGTT
2251	ATGAAGATAT	TTCAGCATAC	TTGCTGAGTA	AAAACAATGC	CATTGAACCA
2301	AGAAGCTTCT	CCCAGAATT	AAGACACCCCT	AGCACTAGGC	AAAAGCAATT
2351	TAATGCCACC	CCACCGACT	TGAAAACGCCA	TCAACGGGAA	ATAACTCGTA
2401	CTACTCTTCA	GTCAGATCAA	GAGGAATTG	ACTATGATGA	TACCATATCA
2451	GTTGAAATGA	AGAAGGAAGA	TTTTGACATT	TATGATGAGG	ATGAAAATCA
2501	GAGCCCCCGC	AGCTTTCAA	AGAAAACACG	ACACTATTTT	ATTGCTGCA
2551	TGGAGAGGCT	CTGGGATTAT	GGGATGAGTA	GCTCCCCACA	TGTTCTAAGA
2601	AACAGGGCTC	AGAGTGGCAG	TGTCCCTCAG	TTCAAGAAAG	TTGTTTTCCA
2651	GGAATTTACT	GATGGCTCCT	TTACTCAGCC	CTTATACCGT	GGAGAACTAA

Fig. 12A

2701	ATGAACATTT	GGGACTCCTG	GGGCCATATA	TAAGAGCAGA	AGTTGAAGAT
2751	AAATATCATGG	TAACCTTCAG	AAATCAGGCC	TCTCGTCCCT	ATTCCCTTCTA
2801	TTCTAGCCTT	ATTTCTTATG	AGGAAGATCA	GAGGCAAGGA	GCAGAACCTA
2851	GAAAAAACTT	TGTCAAGCCT	AATGAAACCA	AAACTTACTT	TTGGAAAGTG
2901	CAACATCATA	TGGCACCCAC	TAAAGATGAG	TTTGACTGCA	AAGCCTGGGC
2951	TTATTTCTCT	GATGTTGACC	TGGAAAAAGA	TGTGCACTCA	GGCCTGATTG
3001	GACCCCTCT	GGTCTGCCAC	ACTAACACAC	TGAACCCTGC	TCATGGGAGA
3051	CAAGTGACAG	TACAGGAATT	TGCTCTGTTT	TTCACCATCT	TTGATGAGAC
3101	CAAAAGCTGG	TACTTCACTG	AAAATATGGA	AAGAAACTGC	AGGGCTCCCT
3151	GCAATATCCA	GATGGAAGAT	CCCACCTTTA	AAGAGAATT	TCGCTTCCAT
3201	GCAATCAATG	GCTACATAAT	GGATACACTA	CCTGGCTTAG	TAATGGCTCA
3251	GGATCAAAGG	ATTGATGGT	ATCTGCTCAG	CATGGGCAGC	AATGAAAACA
3301	TCCATTCTAT	TCATTTCACT	GGACATGTGT	TCACTGTACG	AAAAAAAGAG
3351	GAGTATAAAA	TGGCACTGTA	CAATCTCTAT	CCAGGGTGT	TTGAGACAGT
3401	GGAAATGTTA	CCATCCAAAG	CTGGAATTG	GCGGGTGGAA	TGCCTTATTG
3451	GCGAGCATCT	ACATGCTGGG	ATGAGCACAC	TTTTTCTGGT	GTACAGCAAT
3501	AAGTGTAGA	CTCCCCCTGGG	AATGGCTTCT	GGACACATTA	GAGATTTCA
3551	GATTACAGCT	TCAGGACAAT	ATGGACAGTG	GGCCCCAAAG	CTGGCCAGAC
3601	TTCATTATTC	CGGATCAATC	AATGCCTGGA	GCACCAAGGA	GCCCTTTCT
3651	TGGATCAAGG	TGGATCTGTT	GGCACCAATG	ATTATTCACTG	GCATCAAGAC
3701	CCAGGGTGCC	CGTCAGAACT	TCTCCAGCCT	CTACATCTCT	CAGTTTATCA
3751	TCATGTATAG	TCTTGATGGG	AAGAAGTGGC	AGACTTATCG	AGGAAATTCC
3801	ACTGGAACCT	TAATGGTCTT	CTTGCGCAAT	GTGGATTCA	CTGGGATAAA
3851	ACACAATATT	TTTAACCCCTC	CAATTATTGC	TCGATACATC	CGTTGCAACC
3901	CAACTCATT	TAGCATTGCG	AGCACTCTTC	GCATGGAGTT	GATGGGCTGT
3951	GATTTAAATA	GTTGCAGCAT	GCCATTGGGA	ATGGAGAGTA	AAGCAATATC
4001	AGATGCACAG	ATTACTGCTT	CATCCTACTT	TACCAATATG	TTTGCCACCT
4051	GGTCTCCTTC	AAAAGCTCGA	CTTCACCTCC	AAGGGAGGAG	TAATGCCTGG
4101	AGACCTCAGG	TGAATAATCC	AAAAGAGTGG	CTGCAAGTGG	ACTTCCAGAA
4151	GACAATGAAA	GTCACAGGAG	TAACTACTCA	GGGAGTAAA	TCTCTGCTTA
4201	CCAGCATGTA	TGTGAAGGAG	TTCCTCATCT	CCAGCAGTCA	AGATGGCCAT
4251	CAGTGGACTC	TCTTTTTCA	GAATGGAAA	GTAAAGGTT	TTCAGGGAAA
4301	TCAAGACTCC	TTCACACCTG	TGGTGAACTC	TCTAGACCCA	CCGTTACTGA
4351	CTCGCTACCT	TCGAATTAC	CCCCAGAGTT	GGGTGCACCA	GATTGCCCTG
4401	AGGATGGAGG	TTCTGGGCTG	CGAGGGCACAG	GACCTCTACT	GAGGGTGGCC
4451	ACTGCAGCAC	CTGCCACTGC	CGTCACCTCT	CCCTCCTCAG	CTCCAGGGCA
4501	GTGTCCCTCC	CTGGCTTGCC	TTCTACCTT	GTGCTAAATC	CTAGCAGACA
4551	CTGCCTTGAA	GCCTCCTGAA	TTAACTATCA	TCAGTCCTGC	ATTCTTTGG
4601	TGGGGGGCCA	GGAGGGTGCA	TCCAATTAA	CTTAACCTT	ACCGTCGACC
4651	TGCAGGCCCA	ACGCGGCCGC			

Fig. 12B

1	AAGCTTAAAC	CATGCCCATG	GGGTCTCTGC	AACCGCTGGC	CACCTTGTAC
51	CTGCTGGGGA	TGCTGGTCGC	TTCCGTGCTA	GCCGCCACCC	GCCGCTACTA
101	CCTGGGCGCC	GTGGAGCTGT	CCTGGGACTA	CATGCAGAGC	GACCTGGGCG
151	AGCTCCCCGT	GGACGCCCGC	TTCCCCCCCC	GCGTCCCCAA	GAGCTTCCCC
201	TTCAACACCA	CGTGGGTGA	CAAGAAAACC	CTGTTCGTGG	AGTTCACCGA
251	CCACCTGTT	AACATTGCCA	AGCCGCGCCC	CCCCTGGATG	GGCCTGCTGG
301	GCCCCACCAT	CCAGGCCGAG	GTGTACGACA	CCGTGGTGAT	CACCTGAAG
351	AACATGGCCA	GCCACCCGT	CAGCCTGCAC	GCCGTGGGCG	TGAGCTACTG
401	GAAGGCCAGC	GAGGGCGCCG	AGTACGACGA	CCAGACGTCC	CAGCGCGAGA
451	AGGAGGACGA	CAAGGTGTT	CCGGGGGGGA	GCCACACCTA	CGTGTGGCAG
501	GTGCTTAAGG	AGAACGGCCC	TATGGCCAGC	GACCCCTGT	GCCTGACCTA
551	CAGCTACCTG	AGCCACCGT	ACCTGGTGA	GGATCTGAAC	AGCGGGCTGA
601	TCGGCGCCCT	GCTGGTGTGT	CGCGAGGGCA	GCCTGGCCAA	GGAGAAAACC
651	CAGACCCCTG	ACAAGTTCAT	CCTGCTGTT	GCCGTGTTCG	ACGAGGGGAA
701	GAGCTGGCAC	AGCGAGACTA	AGAACAGCCT	GATGCAGGAC	CGCGACGCCG
751	CCAGCGCCCG	CGCCTGGCCC	AAGATGCACA	CCGTTAACGG	CTACGTGAAC
801	CGCAGCCTGC	CCGGCCTGAT	CGGCTGCCAC	CGCAAGAGCG	TGTACTGGCA
851	CGTCATCGGC	ATGGGCACCA	CCCCTGAGGT	GCACAGCATC	TTCCCTGGAGG
901	GCCACACCTT	CCTGGTGCAC	AACCACCGCC	AGGCCAGCCT	GGAGATCAGC
951	CCCATCACCT	TCCTGACTGC	CCAGACCCCTG	CTGATGGACC	TAGGCCAGTT
1001	CCTGCTGTT	TGCCACATCA	GCAGCCACCA	GCACGACGGC	ATGGAGGCTT
1051	ACGTGAAGGT	GGACAGCTGC	CCCGAGGGAGC	CCCAGCTGCG	CATGAAGAAC
1101	AACGAGGAGG	CCGAGGACTA	CGACGACGAC	CTGACCGACA	GCGAGATGGA
1151	TGTCGTACGC	TTCGACCGACG	ACAACAGCCC	CAGCTTCATC	CAGATCCGCA
1201	GGGTGGCCAA	GAAGCACCC	AAGACCTGGG	TGCACTACAT	CGCCGCCGAG
1251	GAGGAGGACT	GGGACTACGC	CCCGCTAGTA	CTGGCCCCCG	ACGACCGCAG
1301	CTACAAGAGC	CAGTACCTGA	ACAACGGCCC	CCAGCGCATC	GGCCGCAAGT
1351	ACAAGAAGGT	GCGCTTCATG	GCCTACACCG	ACGAGACTTT	CAAGACCCGC
1401	GAGGCCATCC	AGCACGAGTC	CGGCATCCTC	GGCCCCCTGC	TGTACGGCGA
1451	GGTGGGCGAC	ACCCTGCTGA	TCATCTTCAA	GAACCAGGCC	AGCAGGCCCT
1501	ACAACATCTA	CCCCCACGGC	ATCACCGACG	TGCGCCCCCT	GTACAGCCGC
1551	CGCCTGCCCA	AGGGCGTGAA	GCACCTGAAG	GACTTCCCCA	TCCTGCCCGG
1601	CGAGATCTC	AAGTACAAGT	GGACCGTGAC	CGTGGAGGAC	GGCCCCACCA
1651	AGAGCGACCC	CCGCTGCCCTG	ACCCGCTACT	ACAGCAGCTT	CGTGAACATG
1701	GAGCGCGACC	TGGCCTCCGG	ACTGATCGGC	CCCCTGCTGA	TCTGCTACAA
1751	GGAGAGCGTG	GACCAGCGCG	GCAACCAGAT	CATGAGCGAC	AAGCGCAACG
1801	TGATCCTGTT	CAGCGTGTTC	GACGAGAAC	GCAGCTGGTA	TCTGACCGAG
1851	AACATCCAGC	GCTTCCCTGCC	CAACCCCGCT	GGCGTGCAGC	TGGAAGATCC
1901	CGAGTTCCAG	GCCAGCAACA	TCATGCACAG	CATCAACGGC	TACGTGTTCG
1951	ACAGCCTGCA	GCTGAGCGTG	TGCCTGCATG	AGGTGGCCTA	CTGGTACATC
2001	CTGAGCATCG	GCGCCCAGAC	CGACTTCCCTG	AGCGTGTCT	TCTCCGGGTA
2051	TACCTTCAAG	CACAAGATGG	TGTACCGAGGA	CACCCCTGACC	CTGTTCCCC
2101	TCTCCGGCGA	GACTGTGTT	ATGTCTATGG	AGAACCCCGG	CCTGTGGATT
2151	CTGGGCTGCC	ACAACAGCGA	CTTCCGCAAC	CGCGGCATGA	CTGCCCTGCT
2201	GAAAGTCTCC	AGCTGCCGACA	AGAACACCGG	CGACTACTAC	GAGGACAGCT
2251	ACGAGGACAT	CTCCGCCTAC	CTGCTGTCCA	AGAACAAACGC	CATCGAGCCC
2301	CGCTCCTCT	CCCCAAACTC	CCGCCACCCC	AGCACCGC	AGAACAGTT
2351	CAACGCCACC	CCCCCCGTGC	TGAAGCGCCA	CCAGCGCGAG	ATCACCCGCA
2401	CCACCCCTGCA	AAGCGACCAG	GAGGAGATCG	ACTACGACGA	CACCATCAGC
2451	GTGGAGATGA	AGAAGGAGGA	CTTCGACATC	TACGACGAGG	ACGAGAACCA
2501	GAGCCCCCGC	TCCTTCCAAA	AGAAAACCCG	CCACTACTTC	ATCGCCGCCG
2551	TGGAGCGCCT	GTGGGACTAC	GGCATGAGCA	GCAGCCCCCA	CGTCCTGCGC
2601	AACCAGGCC	AGAGCGGCAG	CGTCCCCAG	TTCAAGAAGG	TGGTGTTC
2651	GGAGTTCA	GACGGCAGCT	TCACCCAGCC	CCTGTACCGC	GGCGAGCTGA

Fig. 13A

2701	ACGAGCACCT	GGGCCTGCTC	GGCCCCTACA	TCCGCGCCGA	GGTGGAGGAC
2751	AACATCATGG	TGACCTTCCG	CAACCAAGCC	TCCCAGGCCCT	ACTCCTTCTA
2801	CTCCTCCCTG	ATCAGCTACG	AGGAGGACCA	GCGCCAGGGC	GCCGAGCCCC
2851	GCAAGAACTT	CGTGAAGGCC	AACGAGACTA	AGACCTACTT	CTGGAAGGTG
2901	CAGCACCAACA	TGGCCCCCAC	CAAGGACGAG	TTCGACTGCA	AGGCCTGGGC
2951	CTACTTCAGC	GACGTGGACC	TGGAGAAGGA	CGTGCACAGC	GGCCTGATCG
3001	GCCCCCTGCT	GGTGTGCCAC	ACCAACACCC	TGAACCCCCC	CCACGGGAGG
3051	CAGGTGACTG	TGCAGGAATT	TGCCCTGTT	TTCACCATCT	TCGACGAGAC
3101	TAAGAGCTGG	TACTTCACCG	AGAACATGGA	GCGCAACTGC	CGCGCCCCCT
3151	GCAACATCCA	GATGGAAGAT	CCCACCTTCA	AGGAGAACTA	CCGCTTCCAC
3201	GCCATCAACG	GCTACATCAT	GGACACCCCTG	CCCGGCCTGG	TGATGGCCCA
3251	GGACCAGCGC	ATCCGCTGGT	ACCTGCTGTC	TATGGGCAGC	AACGAGAAC
3301	TCCACAGCAT	CCACTTCAGC	GGCCACGTTT	TCACCGTGC	CAAGAAGGAG
3351	GAGTACAAGA	TGGCCCTGTA	CAACCTGTAC	CCCGGCCTGT	TCGAGACTGT
3401	GGAGATGCTG	CCCAGCAAGG	CCGGGATCTG	GCGCGTGGAG	TGCCCTGATCG
3451	GCGAGCACCT	GCACGCCGGC	ATGAGCACCC	TGTTCCCTGGT	GTACAGCAAC
3501	AAGTGCCAGA	CCCCCCTGGG	CATGGCCAGC	GGCCACATCC	GCGACTTCCA
3551	GATCACCGCC	AGCGGCCAGT	ACGGCCAGTG	GGCTCCCAAG	CTGGCCCGCC
3601	TGCACTACAG	CGGCAGGCATC	AACGCCTGGT	CGACCAAGGA	GCCCTTCTCC
3651	TGGATCAAGG	TGGACCTGCT	GGCCCCCATG	ATCATCCACG	GCATCAAGAC
3701	CCAGGGCGCC	CGCCAGAACT	TCAGCAGCCT	GTACATCAGC	CAGTTCATCA
3751	TCATGTACTC	TCTAGACGGC	AAGAAGTGGC	AGACCTACCG	CGGCAACAGC
3801	ACCGGCACCC	TGATGGTGT	CTTCGGCAAC	GTGGACAGCA	CGGGCATCAA
3851	GCACAACATC	TTCAACCCCC	CCATCATCGC	CCGCTACATC	CGCCTGCACC
3901	CCACCCACTA	CAGCATCCGC	AGCACCCCTGC	GCATGGAGCT	GATGGGCTGC
3951	GACCTGAACA	GCTGCAGCAT	GCCCCCTGGGC	ATGGAGAGCA	AGGCCATCAG
4001	CGACGCCAG	ATCACCGCCT	CCAGCTACTT	CACCAACATG	TTCGCCACCT
4051	GGAGCCCCAG	CAAGGCCCGC	CTGCACCTGC	AGGGCCCGAG	CAACGCCTGG
4101	CGCCCCCAGG	TGAACAAACCC	CAAGGAGTGG	CTGCAGGTGG	ACTTCCAGAA
4151	AACCATGAAG	GTGACTGGCG	TGACCACCCA	GGCGTCAAG	AGCCTGCTGA
4201	CCAGCATGTA	CGTGAAGGAG	TTCCTGATCA	GCAGCAGCCA	GGACGGCCAC
4251	CAGTGGACCC	TGTTCTTCCA	AAACGGCAAG	GTGAAGGTGT	TCCAGGGCAA
4301	CCAGGACAGC	TTCACACCAG	TCGTGAACAG	CCTGGACCCC	CCCCTGCTGA
4351	CCCGCTACCT	GCGCATCCAC	CCCCAGAGCT	GGGTGCACCA	GATGCCCTG
4401	CGCATGGAGG	TGCTGGGCTG	CGAGGGCCAG	GACCTGTACT	GAAGCGGGCCG
4451	C				

Fig. 13B